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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/524,029	03/13/2000	Cynthia S. Bell	ITL.0333US (P8221)	6169

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EXAMINER	
BODDIE, WILLIAM	

ART UNIT	PAPER NUMBER
2629	

MAIL DATE	DELIVERY MODE
03/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/524,029	BELL, CYNTHIA S.	
	Examiner	Art Unit	
	WILLIAM L. BODDIE	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5 and 6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5 and 6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In an amendment dated, January 10th, 2008, the Applicant amended claim 1 and cancelled claims 5 and 7. Currently claims 1-2 and 5-6 are pending.

Response to Arguments

2. Applicant's arguments filed January 10th, 2008 have been fully considered but they are not persuasive.

3. Applicant first argues that Murakami does not disclose receiving an indicator of the ambient light on a display. The Examiner must respectfully disagree.

Murakami clearly states in paragraph 27, that in bright locations the backlight is bright and in darker locations the backlight is darker. This certainly seems to satisfy the broadest reasonable interpretation of the phrase, "ambient light on a display." Ambient light, unless defined otherwise, is seen as the light surrounding an environment. Based on the disclosure of Murakami and the physical locations of the display and the indicator shown in figures 1 and 2 of Murakai, it would seem well within the bounds of the term that the ambient light on the display is synonymous with the ambient light on the imager.

4. Applicant also argues that Nishibe also fails in the same manner as discussed by the Board's decision. The Examiner must again respectfully disagree.

It seems more apparent to the Examiner that the current combination is stronger than any previous rejection due to the different disclosures of the current art, as well as, the increased similarities between Murakami and Nishibe.

For the above reasons, the rejections of claims 1-2 and 5-6 are seen as sufficient and are thus updated to take into account the recent amendment and maintained.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-2 and 5-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Examiner was unable to locate any discussion within the specification reciting the specific limitation that the detected ambient light is the ambient light ***on*** a display. While there is numerous discussion of ambient light detection there is never any recitation that the ambient light is incident on the display. There is, however, an example to the contrary on page 10, lines 15-21 of the specification.

In this discussion of microdisplay systems it is contemplated that the invention is used for microdisplays which specifically "exclude external light." The embodiment goes on to discuss "adjusting the display brightness based upon the ambient lighting." Thus, in at least this embodiment, the Applicant has defined ambient lighting to refer to environmental lighting and not specific to the ambient light directly incident on the display. This definition is in contradiction to the currently claimed limitations of claim 1 and its dependents claims 2 and 5-6.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (JP 08-242398) in view of Nishibe et al. (US 4,847,483).

With respect to claim 1, Murakami discloses, receiving an indicator (light of a given level via lens 10) of the ambient light on a display (LCD – 102) by accumulating energy into a plurality of sensors (image pick-up element 32), determining the indicator (level of the light is determined – [0026]), and automatically adjusting a brightness for the display based upon the indicator [0027] of ambient light on the display (bright location backlight is bright, and in dark locations backlight is darker – [0027]).

In Murakami the indicator is determined by averaging the luminance over the entire image plane [0026], and therefore the determination of the indicator is not based upon an integration time derived on the basis of the accumulated energy. However, it is conventional in the art to determine the level of ambient light by deriving an integration time of an image sensor based upon accumulated light energy and using the value of the integration time as a determinate of light level as disclosed in Nishibe et al. (column 1, lines 12-13 and 41-42; column 2, lines 28-31). Note that the integration time is derived based upon the accumulated energy In that the length of the period of integration depends on the level of the light, and further the indicator of light level is based on the period of time required for the integrated value to reach a predetermined

value (column 2, lines 28-31). The arrangement in Nishibe et al. enables light measurement to be performed over a wide dynamic range (column 2, lines 16-18), a feature well known in the art to be important due to the wide range of light levels encountered in imaging operations (see for instance, column 1, lines 55-60).

Furthermore it is clear that the Nishibe et al. arrangement would be faster and less processing-intensive than the arrangement of Murakami since the need to compute an average light level over the entire image plane would not be necessary.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to employ in Murakami the method taught in Nishibe et al. to determine the indicator in order to enable the device to perform in an ambient environment having a large range of light levels and to reduce the time and burden of image processing.

With respect to claim 6, the accumulating energy in Murakami produces an analog signal [0021].

9. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami (JP 08-242398) in view of Nishibe et al. (US 4,847,483) and further in view of Helms (US 5,760,760).

With respect to claim 2, Murakami and Nishibe et al. are silent as to how the indicator is used in adjusting display brightness. However, it is well known in the art to perform such an operation by using a brightness adjustment indicator in a look-up table as disclosed in column 4, lines 6-21 of Helms. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the indicator of Murakami and Nishibe et al. as an index in a look-up table as part of the operation of CPU35 in order

to implement a reliable and well-established design for adjusting the brightness of a display on the basis of ambient light.

With respect to claim 5, Helms discloses receiving a brightness value for the display from the look-up table (column 4, lines 6-21).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/W. L. B./
Examiner, Art Unit 2629
3/24/08